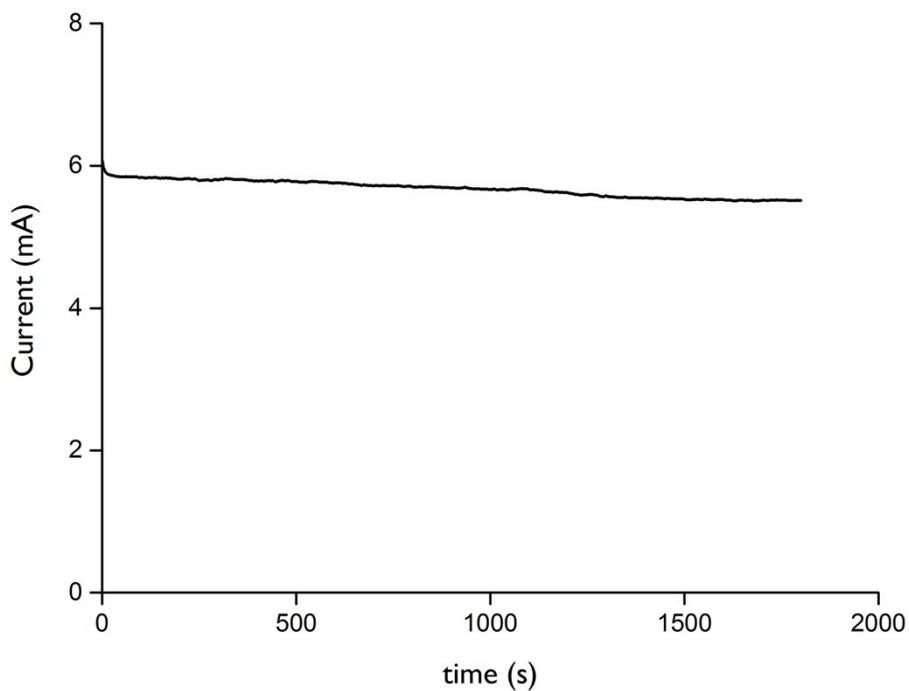
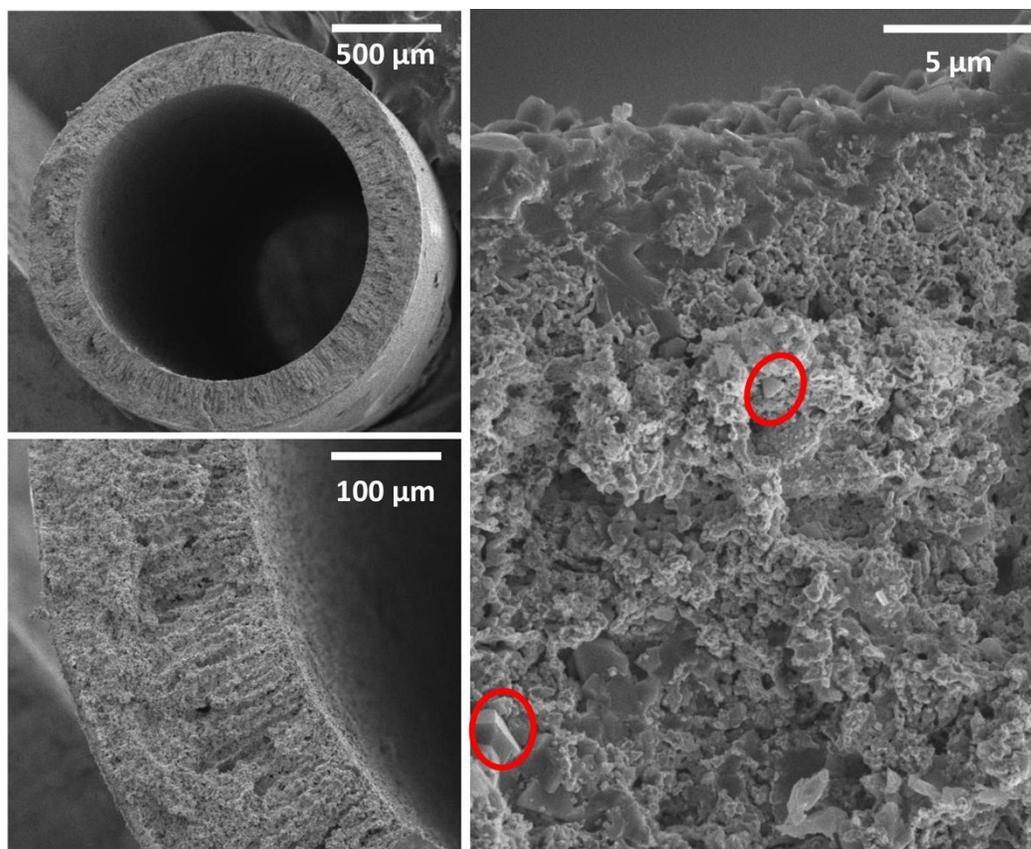


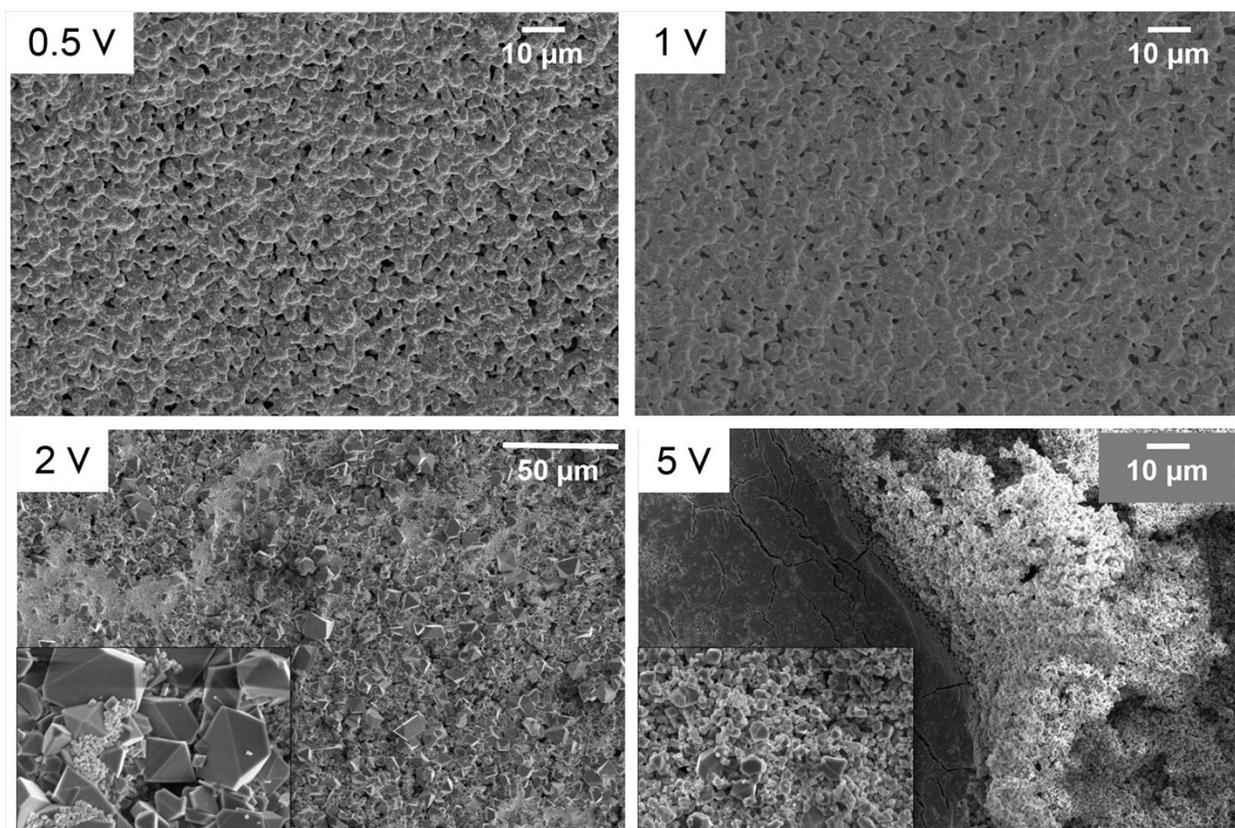
### Supporting Information



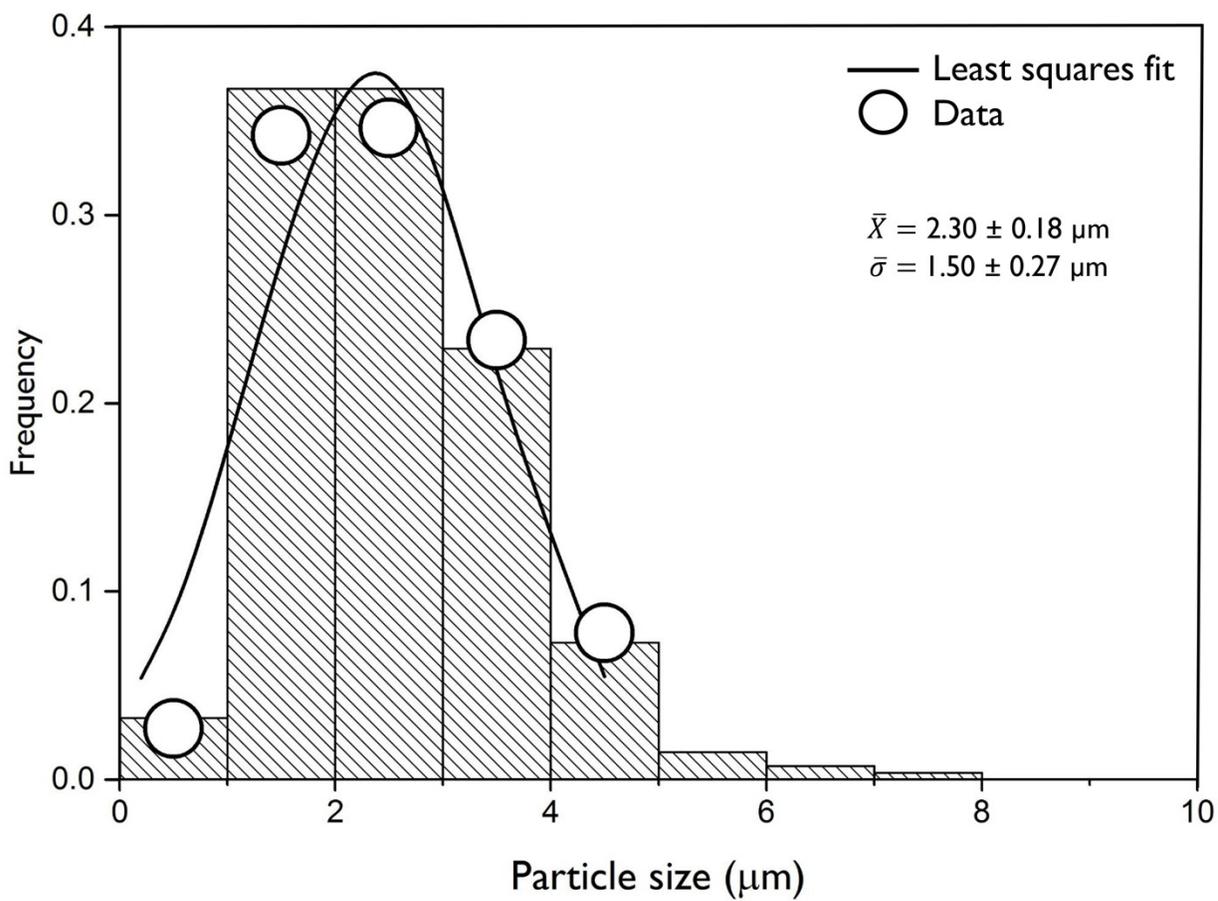
**Fig. S1** Current-time graph during the synthesis of sample E-0.5V



**Fig. S2** Cu-BTC MOF crystal formation in the interior of the hollow fiber. SEM images of the cross-section of the Cu-BTC coated Cu HFs. Red circles indicate octahedral Cu-BTC MOF crystals.



**Fig. S3** SEM images of the inner surface of Cu-BTC-coated Cu HFs: E-0.5, E-1, E-2, E-5.



**Fig. S4** Gaussian distribution of particle size of sample E-0.5 with least squares fit, along with larger aggregates. Mean particle size ( $\bar{X}$ ) and the spread ( $\bar{\sigma}$ ) values are shown in the graph.